Benchmarking Workship

Benchmarking Workshop

the marking Workshop

For Training Purposes Only 9 June 1996



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Acknowledgments

The information contained in this workshop has been gathered from a number of sources (i.e., books, experience, personal contacts). One person that I would like to publicly thank is Melissie C. Rumizen, Ph.D., who shared with me her knowledge and findings on benchmarking. I have incorporated many of those thoughts and findings into this workshop.



Team Na	ıme:			
Team Le	ader:	Tele:		
Project S	Start Date:			
		s may impact more than one area. Please check the nort description.)		
	Service			
	Product Process			
	Other			
Activity	Sponsor:			
Purpose	of Effort/D	Detailed Description: (Be as specific as possible.)		
•	Term: (Key			
•	ng Authorit			



When you complete this work shop you should:

- Have a better understanding of the steps involved in a Benchmarking Study
- **■** Understand the Benchmarking Methods
- Understand the Benchmarking Code of Conduct and Benchmarking Protocol and Ethics
- Understand the different Benchmarking tools
- Understand the Benchmarking jargon
- Understand the necessity for preparation and extensive research



Is the continuous search for excellence through comparative analysis followed by process improvement.

Is the continuous and systematic process of identifying, analyzing, and adapting industries' best practices that will lead an organization to superior performance.

Is the practice of being humble enough to admit that someone else is better at something, and being wise enough to learn how to match and even surpass them at it.



There are several reasons why an organization might benchmark. Some of the more common are to:

- Satisfy customers' needs and expectations
- Discuss and understand the methods and practices needed to reach new goals
- Achieve superior performance
- Adapt best practices
- **■** Develop strategic goals
- Keep informed on the state-of-the-art business practices
- Encourage creative thinking get out of the box
- **■** Competitive comparisons



Benchmarking Is:

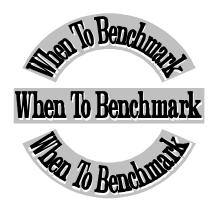
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- **☑** A discovery process
- oxdot An improvement method
- **☑** A source of breakthrough
- ☑ A learning opportunity
- **☑** An objective analysis
- ☑ A process-based analysis
- **☑** Management commitment
- **☑** Continuous



Benchmarking Is NOT:

- **☒** A cookbook process
- **☒** A panacea for problems
- **☒** Comparing to "similar" organizations
- A management fad
- **▼** Just a review of own operations
- **▼** Just measurement
- **☒** Just quantitative
- **☒** Industrial Tourism
- ★ A free trip
- **☒** Reinventing the wheel



Benchmarking should be considered because of:

- **■** Management changes
- New or changing operations
- **■** Changing industry dynamics
- **■** Continuous improvement
- Changing or adapting to new processes, products, or services
- **■** Process redesign initiatives
- **■** Survival



Where can I research leaders of industry:

- Agency Experts
- **■** Congressional Quarterly
- National Technical Information (NTIS)
- Center for the Utilization of Federal Technology (CUFT)
- National Institute of Standards and Technology (NIST)
- Annual Reports maintained by the U.S. Securities and Exchange Commission (SEC)
- **■** Best Practice Data Bases
- Strategic Planning Institute's Council on Benchmarking
- The Navy Best Manufacturing Practices Data base
- **■** The Benchmarking Exchange
- National Center for Manufacturing Sciences
- Wharton University Environmental Forum
- International Benchmarking Clearinghouse (IBC)
- **■** Council for Continuous Improvement (CCI)
- **■** Colleges/University libraries
- **■** Consultants

- **■** Professional Associations
- **■** Articles/Periodicals
- On-line data bases
 - * DIALOG
 - * INTERNET
 - * BENCHNET
- Malcomb Baldrige Office



Some of the Benefits of Benchmarking are:

- $\overline{\mathbf{V}}$ A better understanding of products and services $\overline{\mathbf{V}}$ A better understanding about customers needs and expectations $\overline{\mathbf{V}}$ Meaningful goals and performance measures reflecting customer requirements $\overline{\mathbf{Q}}$ **Employees who strive for excellence and promote** breakthrough thinking $oldsymbol{
 em}$ **Employees who better understand the internal** processes within their organization while increasing the sensitivity to changes in customer needs
- **☑** The accelerated rate of change within an organization
- ✓ A better understanding of competitors and industry dynamics



Some benchmarking tips are:

- → Select the right team and mix of skills
- → Team should have adequate understanding of process under study
 - * Helps you have a realistic perspective of your process
 - * Helps you understand the smaller activities included in the overall processes
- → When selecting benchmarking partners, do not confine yourself to companies in your own industry
- → Provide an incentive for a potential partner to participate
- → Focus on best practices, not just measurements
- → When selecting your benchmarking team include supporters and skeptics alike



Some critical benchmarking mistakes are:

X	Own	process	not	examined
---	-----	---------	-----	----------

- **"Feel Good" trips**
- **Soals and questions too vague**
- **Scope too broad**
- **Example 2** Lack of team commitment
- **☒** No upfront research
- **▼** Wrong benchmarkee
- **☒** Didn't go outside of own industry
- **➣** No action taken





Method	Description	<u>Advantages</u>	Disadvantages
Internal	An approach to benchmarking where organizations learn from "sister" companies, divisions, or operating units. Performance improvement may be 10 percent.	 Provides highest degree of process detail and simplified access to process information. Provides rapid and easy-to-adapt improvements. 	The internal focus tends to be operational rather than strategic, and bound by the organization's cultural norms.
Competitive	An approach to benchmarking that targets specific product designs, process capabilities, or administrative methods used by one's direct competitors. Performance improvement may be 20 percent or better.	 Provides a strategic insight into marketplace competitiveness and can provide a "wake-up" call to action. Prioritizes areas of improvement according to competition. 	 Legal issues regarding business relations between competitors may become an issue. The detail from the study may be insufficient for diagnosis.
Functional	An approach to benchmarking that seeks information from the same functional area within a particular application or industry. Performance improvement may be 35 percent or better.	Takes advantage of function and professional networks to develop detailed process understanding.	- Although an external perspective is used, the functional concentration tends to best support operational studies.
Generic	An approach to benchmarking that seeks process performance information from outside one's own industry. Enablers are translated from one organization to another through the interpretation of their analogous relationship. Performance improvement may be 35 percent or better.	 Provides the greatest opportunity for process breakthroughs. Because organizations don't compete, reliable detailed information is usually available. 	 Difficulty in developing an analogy between dissimilar businesses. Difficulty in understanding which companies to benchmark.





What type of Benchn	narking Study?
	Competitive Assessment (2-4 weeks)
_	Fast Track Benchmarking (90 days)
_	Benchmarking (6-9 months)
Does management un	derstand benchmarking?
	Yes
	No
Is management comn	nitted?
	Yes
	No
	narking study tie into the strategic pla
Who are my customer	
	Top Management
	The General Public

What is driving t	he be	enchmarking study?
		A different/new process
		Improvement over current ways of doing
		things
		_
		· · · · · · · · · · · · · · · · · · ·
What are we goir	ng to	benchmark?
6		Products
	\Box	Services
		Other
	H	Other
	Ш	
What resources a	re co	mmitted to the study?
		Equipment
		Space
What resources a	re ne	eeded for the study?
What resources a		reded for the study.
	Ш	
How is the infor	matio	on to be used?
		To stimulate breakthrough thinking
		To compare products/processes
		To find new and innovative ideas
		Other

Team Agreement

What is the need for a "Team Agreement"?

The "Team Agreement" is a tool to help you and other team members gather up-front information about the team and your role within it.

In order to take a leadership role within the team and to contribute to its success, you need to have a clear understanding of:

- Why the team was formed
- How the team and its work fit into the larger organization
- What the performance expectations are for the team

Later on, when significant changes occur within the team or within the larger organization, the "Team Agreement" will help you review this essential information again.

When should the team use the "Team Agreement"?

Specific cues the team should watch for are:

- Starting a new project
- Needs to adjust to a change in direction or plans
- Has difficulty meeting deadlines
- Has a new leader
- Is clarifying roles and responsibilities
- Or when the team changes its focus

How is the "Team Agreement" used?

When a new team is forming, the team leader or a senior manager usually gives the team essential background information, including why the team was formed and how the team's mission fits into the organization's mission and goals.

As the team leader or senior manager presents the information, the team should record it on the "Team Agreement". Ask questions to be sure you have all the information you need for a complete response. Ask the team leader, a senior manager, or other team members for the information you need to complete any items where "No" was checked for enough information. The team member section should be completed by each team member individually.

When the team changes direction, the agreement will help you understand the scope of the change and the impact it will have on the team and on the team's purpose or mission.

When you join an existing team, you may want to meet with one or more team members and ask them the agreement questions.

Why is the "Team Agreement" beneficial to the team?

As the team begins to develop and gains experience, refer to the agreement periodically to see if the team's activities still align with its original purpose and goals. Measure your action plans against the agreement.

Once team members have a clear idea of the scope of the team's assignment, individual roles can become more specific and targeted to the desired results.

PROJECT OBJECTIVES

(To be completed as a team)

- 1. What is the team's name, purpose, and scope of responsibility?
- 2. How does that purpose fit into the larger organization's goals/strategies?
- 3. Who will benefit from the efforts of this project?
- 4. What milestones exist for our team?(*Please attach action plan.*)
- 5. What will we measure to determine if our team has been successful? (*i.e., critical success factors.*)
- 6. What is our plan for establishing a baseline and measuring to evaluate success? (*Include time frames*.)

DECISION MAKING

(To be completed as a team)

- 1. What are the limits on our authority to make decisions?
- 2. Who approves decisions that are outside our limits?

TEAM NEEDS/RESPONSIBILITIES

(To be completed as a team)

- 1. What resources will be available to us? (*i.e.*, *people*, *systems*, *budget*, *equipment*.)
- 2. Will we be doing activities that we don't currently know how to do? If so, how will we get the training we need?
- 3. How will we communicate results to our own office and the whole organization?

TEAM MEMBER RESPONSIBILITIES

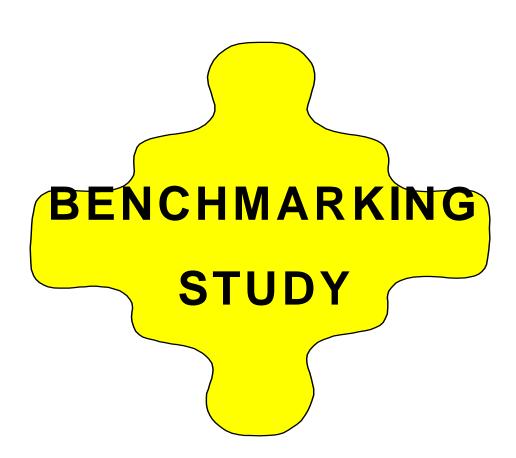
(To be completed by each team member)

- 1. What is my specific role on this team? Long-term responsibilities?
- 2. What time commitment for participation on this team will be required of me? (Meeting days/times, begin/end dates, and hours per week for team related activities.)
- As a member of this team, I will have:
 _____ No change in job expectations, unless later acknowledged by a revised agreement form **
 ____ Will have the following changes in job expectations:
- ** Upon notification by my team leader, I will notify my supervisor if there are any changes to the time requirements.

COMMITMENT

The team receives guidance fromapproval for recommendations fromagreement serves as our pledge of commitment to objectives. If needed, this agreement will be reviappropriate signatures.	
Signatures:	
Employee	Date
Supervisor	Date
Director	Date
Team Leader	Date







Is selecting and defining the process to be studied, obtaining leadership commitment, organizing a team, identifying the process performance measures, and evaluating your current process capabilities.

The eleven steps to follow during the PLANNING stage are:

	Select the process
	Identify and gain participation of sponsor and
	stakeholder
	Submit benchmarking request to Benchmarking
	Coordinator
	Select team members
	Obtain Benchmarking Awareness Training
	Identify objective of benchmarking study
	Identify products/services, customers, and their
	expectations
	Analyze and document process flow
	Establish generic performance measures
	Identify/select Critical Success Factors (CSF)
П	Develop criteria for secondary research

Select the process:

- ♦ One that has a big impact on performance
- ♦ One that causes customer dissatisfaction
- ♦ One that is not performing up to customer standards

Identify and gain participation of sponsor and stakeholder:

- **♦** Obtain approval from executive staff
- ◆ Discuss the benchmarking study with sponsor and stakeholder and obtain commitment and resources

Factors that decrease resources needed

- A quality approach is in place
- **■** The scope is limited
- Few organizations or processes are affected
- **■** Few people are involved
- Only research which requires no travel will be conducted, such as secondary research and telephone interviews
- Benchmarking is established in the organization
- The team has experience in benchmarking
- The team is dedicated solely to this project

Submit benchmarking request form to Benchmarking Coordinator:

- ◆ Contact the Benchmarking Coordinator to ensure this type of study has not been done before
- ♦ Obtain the request form and return to Coordinator with appropriate information and approving authority signature

Select team members:

There are many variations possible in team composition. There may be an individual team or a core team with several task teams. The team composition should be carefully determined based on the scope of the effort, the available resources, and the overall objective.

- ◆ Team size is dependent on the scope of the project (four to eight team members usually constitute a good working group)
- ♦ A team should be cross functional, representing all functions involved in the process
- ♦ A team member should have some of the following attributes:
 - ✓ Process knowledge or expertise
 - **☑** Responsibility for implementation
 - ☑ A Stakeholder
 - **☑** Objective
 - ☑ Analytical
 - **☑** Flexible
 - ☑ Risk taker
 - **☑** Optimistic
 - ☑ Dependable
 - **☑** Communicator

Provide Benchmarking Awareness Training:

- **♦** Request a benchmarking overview
- **♦** Request JIT training on benchmarking as study evolves

Identify objective of benchmarking study:

♦ Define the specific scope of the study

Identify your products/services, customers, and their expectations:

- ◆ Identify the products and services (outputs) generated through the function or process being benchmarked (See S-1-1)
- ♦ Identify the customers who use the products and services (See S-1-2)
- ♦ Identify the customers needs and expectations through focus sessions, surveys, interviews, etc.

Analyze and document process flow:

- ♦ Flowchart the process or function being benchmarked (See S-1-3)
- ◆ Gather information from flow charts, face to face interviews, archival records
- ◆ Posses a comprehensive knowledge of your own process, understand the process from beginning (source of inputs) to end (who receives the outputs)
- ♦ Understand how changes will effect others
- ◆ Use any source of information within own organization that could lead to obvious improvements and that can be accomplished as short term goals (entitlements)
- Document your performance standards

Establish generic performance measures:

- ◆ Establish basic performance measures e.g., quality, cost, cycle time (See worksheet S-1-4)
- ♦ Establish specific measures to allow you and your partner to speak from the same sheet of music
- ◆ Establish a baseline to serve as the foundation for comparison of improvements

Identify/select Critical Success Factors (CSF):

- ♦ Identify the process that has the greatest impact on performance (See worksheet S-1-5)
- ♦ Identify activities that have the greatest impact on customers
- ♦ Convert CFS's into specific metrics that will allow best-in-class organizations to better understand your information requirements

Develop criteria for secondary research:

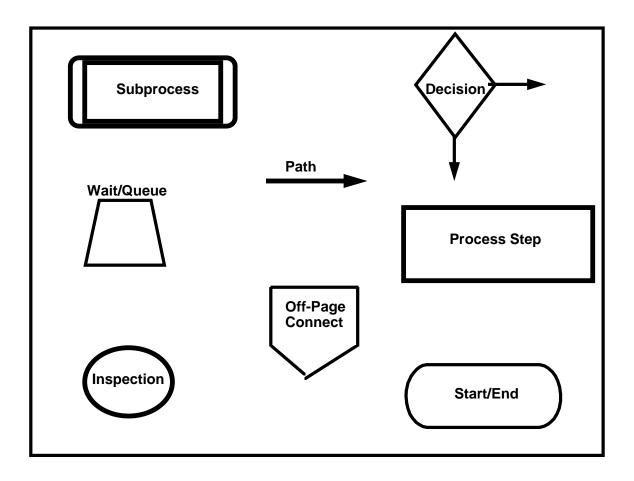
- ◆ Acquaint the team with the type of data that will be needed for the study
- ◆ Develop standard questions for team to use during literature search (See S-1-6)
- ♦ Develop format to capture information gathered

Product/Service Work Sheet

1 Toddet/Scrvice Work Sheet	
What are the key products and services?	
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	

Customer Work Sheet
Who are our customers?
1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.
12.

Process Mapping Symbols



MEASUREMENT

In order to measure the success of a program or project:

■ Determine your **outputs** by asking: What are our final outputs (products/services)? What are we in business to provide?

Once your outputs are identified, consider the following categories for developing performance measures to determine how well you are providing your output.

quality: What are we trying to achieve with each output? What

is important to customer(s)? Includes

timeliness/cycle time.

quantity: Number of outputs provided **productivity:** Number of outputs per FTE

efficiency: Cost per output (including both direct and indirect labor)

■ Determine **outcomes** by asking: Why do we provide the outputs (products/services)? What are we in business to achieve?

Once your outcomes are identified, consider the following categories for developing performance measures to determine how well you are achieving the desired outcome.

effectiveness: How will we know if we have achieved our outcome? **customer satisfaction:** What are our customer's perceptions relative to the outcome?

Once your performance measures have been developed, use one of the methods on the attached chart to establish your baseline. Repeat the measurements at appropriate intervals to track progress.

Measurement Work Sheet

Process	Type of Measurement (i.e., cycle time, cost, quality)	Customer Expectations	Current Measurement	<u>Impact</u>

CSF Worksheet					
Process	<u>Output</u>	CSF	Measurement		
		İ			

Literature Search Criteria (Internal Questionnaire)

Example:

- 1. What type of organization?
- 2. What type of Self Managed Work Teams (SMWT) are used? (Are they truly the SMWT that we are interested in?)
- 3. What type of process are teams involved with?
- 4. When was SMWT's introduced into the organization?
- 5. What is the current staffing size? What percentage is involved with SMWT's?
- 6. What type of team configuration is used?
- 7. What are the size of the teams?
- 8. What type of pay, reward and appraisal systems are used with SMWT's?
- 9. What methods are used for quality checks and accountability?
- 10. Is there improvement in work process, cycle time, quality?
- 11. Do they have unions?



Checklist:

literature search?

\checkmark	Do we have stakeholder commitment? What is it?
\checkmark	Do we have a cross functional team? Who are they?
$\overline{\mathbf{V}}$	Do we know the process? What is it?
	Do we know who the process customer is? Who?
	Do we know the products or services delivered to the customer?
	What are they?
	Do we know the customers expectations or requirements?
	Do we know how the process works?
V	Do we currently measure the process? How?
	Do we know what our current process performance is?
V	Do we know the performance goals? What are they?
V	Do we know how the performance goals were established? How?
$\overline{\mathbf{V}}$	Do we have an understanding of what we are looking for in the



Is researching and collecting data on the process that you are benchmarking.

The eleven steps to follow during the COLLECTING stage are:

	Conduct extensive literature search (secondary
	research)
	Identify "best-in-class" and potential partners
	Review legal and ethical issues and benchmarking
	protocol
	Plan data collection strategy
	Select and develop primary research mechanisms
	Conduct initial screening of potential partners
	Collect and analyze initial screening data, narrowing
	potential partner list
	Develop more in-depth questions for second contact
	with the organization
	Collect and analyze in-depth data narrowing
	potential partner list
	Collect preliminary data on the organization for site
	visit
П	Prenare for and conduct site visit

Conduct extensive literature search:

- ◆ Use secondary resources (e.g., data bases, industry/trade publications, government agencies, annual reports, seminars/conferences, networking, professional organizations and books)
- ♦ Develop format to capture information in a uniform manner
- ♦ Document findings and share with team members
- ◆ Develop criteria to rate prospective organizations (e.g., amount of employees required, workload, time constraints, company mission, size, industry)

Identify "best-in-class" and potential partners:

- ♦ Analyze data and compare to your own process
- ♦ Identify best practice organizations (See S-2-1)
- ◆ Start the process of selecting a potential partner(s)
- ♦ Select the organization(s) which best fits the requirements
- ◆ Make the appropriate preparations to contact them for the purpose of validating/verifying the information at hand and possibly obtaining additional information

Review legal and ethical issues and benchmarking protocol:

- ♦ Review the Code of Conduct and The Rules of Protocol
- ♦ You are representing your organization each time you encounter a best-in-class organization
- ♦ Present yourself in a professional manner
- **♦** Be well prepared
- **♦** Be considerate of time constraints
- ♦ Present yourself with confidence and enthusiasm
- ◆ Ask only for information that you would be willing to provide yourself
- ♦ Establish the rules up front with your partner and treat any acquired information as confidential

Plan data collection strategy:

◆ There are several methods used in data collection. Some of the more common are:

<u>Method</u>	<u>Advantages</u>	Disadvantages
Survey	Useful if you have a large number of organizations that you wish to acquire nonsensitive information from in a short period of time. A survey can be used as a tool to help you narrow down your list of prospective partners by measuring your CSF's. If funding is a concern in your organization, then a survey is the tool of choice.	There is usually a low return rate and the inability to provide detailed information. Unless you have trained personnel who can develop a quality survey, you may run the risk of getting zero response.

Questions: A relatively small number of close-ended questions. As there is no immediate feedback, questions must be clearly written so that they are easily understood.

Recommend use: To screen a large number of potential partners. Ask a few vital questions aimed at selecting partners. Then follow up with a telephone interview or site visit.

<u>Method</u>	<u>Advantages</u>	<u>Disadvantages</u>
Telephone Interview	Enables you to obtain answers to questions from a variety of sources within minutes. Conducting interviews over the telephone could provide you with a three hour extension to your business depending on your location within the United States. You also have great flexibility in the clothes you wear along with the location of the interview.	A downside is usually associated with poor preparation. Partners will show little interest in your project if you do not properly identify yourself or state your objectives up front or if you are not sensitive to their time constraints. Conversations on the telephone are usually limited in time and you will be subject to interruptions and then put on hold. Therefore, you will probably end up playing "telephone tag" with your partner in an attempt to complete one information-collection activity.
Questionnaire	Opens communication channels and develop a comfortable relationship with your selected partner(s).	Could backfire and produce tension that can threaten the amount of cooperation received from the partner(s).

Questions: A combination of open-ended and closed-ended questions. The questions should be specific, highly information targeted, and relatively short in length. Questions also must be relatively simple. Reserve complex and involved questions for a written survey or personal interview.

Recommended use: To obtain needed information. It also can substitute for a site visit.

Method Personal Interview/Site Visit

Advantages

Disadvantages

Very rewarding. They allow you to ask follow-up questions that will provide greater detail to the discussion. Information obtained through secondary research can be verified. The chance to observe the process

within the process that are not

in action and clarify functions

fully understood.

A personal interview or site visit will require a greater amount of time in preparation and, depending on the location, it can be expensive.

Questions: Usually open-ended. Questions can be complex and include such visuals as process maps and charts.

Recommended use: Site visits offer the greatest opportunity to understand the processes and practices of others.

Select and develop primary research mechanisms:

- ♦ Brainstorm as a team initial screening questions (See S-2-2)
- ◆ Test the effectiveness of your questions before using it with the organization(s)
- Design rating scheme for data collected to determine potential partners

Conduct initial screening of potential partners:

- ◆ Prepare for initial contact (e.g., telephone script, questionnaire (See S-2-3)
- ♦ Contact an organization and inform them of your intentions
- ◆ Determine the level of interest
- ♦ Inform them why you believe they represent a best-in-class operation
- ♦ Verify information found during secondary research
- ♦ Request their participation in the benchmarking study
- ◆ Set ground rules regarding ethics and protocol so that both parties can clearly understand what is expected before any information is exchanged
- ♦ Ask, mail or fax preliminary screening questions
- ♦ Mail or fax a Letter of Introduction (See S-2-4)
- ♦ Offer a copy of your final report to them for their cooperation

Collect and analyze initial screening data, narrowing potential partner list:

- ♦ Review responses to initial screening questions, as a team
- ◆ Rate organizations, narrowing the list of potential partners (See S-2-5)
- ♦ Select best organizations for further dialog

Develop more in-depth questions for second contact with the organization:

- **♦** Contact selected organizations
- ◆ Decide on data gathering mechanism to be used in further dialog with organization (S-2-6)
- ♦ Ask more in-depth questions
- Document findings
- ♦ Rate organizations, narrowing list to the chosen few
- ◆ Determine if Site-Visit is required

Collect preliminary data on the organization for site visit:

- ♦ Collect logistics information (e.g., who you should talk with)
- ♦ Set a time and date for the visit
- ♦ Determine with your partner the acceptable amount of people that may attend the meeting
- **♦** Determine information exchange
- ◆ Do a follow up call or mail a letter of confirmation just to verify that both parties are still interested and available

Prepare and conduct Site Visit (S-2-7)

Potential Partners Worksheet

Name of Organization	Type of Industry	POC Name/Number	Location

Questionnaire Development

A questionnaire is the most critical tool for conducting primary research. Keep in mind that the questions you ask will determine what information you receive; what you ask for is what you get. Consequently, your questions drive your data collection and analysis. Also, a well-written and easily understood questionnaire can increase the willingness of a partner to participate.

Introduction.

To properly introduce the questionnaire, it should contain enough information to explain the topic of the benchmarking project, how to respond to the questions, and how the information will be obtained and used.

Components of the introduction may include:

- 1. For the participants, the instructions:
 - tell how to answer
 - **■** indicate where to answer
 - provide the estimated time to complete
 - indicate the desired date by which the questionnaire should be completed
- 2. An indication that the Benchmarking Code of Conduct will be observed, and, if necessary, a discussion of the Code of Conduct.
- 3. A definition (boundaries, goal, outputs, etc.) of the issue/process being benchmarked. You may want to include process maps.
- 4. Definitions of "technical" process terminology to be used in the questionnaire. Try to use generic wording if possible, but where it is not possible, define terms.

Questions.

Expect to reexamine and reclarify your goals as you formulate questions. You also may need to take another look at your process. This is a natural and crucial part of developing questions.

Additionally, although you will develop questions for your entire scope you might submit a subset of the questions to a given partner, depending upon how and where they are determined to be "best-in-class."

■ What we want to know.

To be able to use the information we gather to make improvements, questions should focus on the following issues:

- 1. What results do "best-in-class" companies produce that we don't?
- 2. How efficient and cost effective are "best-in-class" companies compared to ours?
- 3. How are "best-in-class" companies work processes and methods different from ours?
- 4. How do "best-in-class" companies support these processes?
- 5. How does the organization of "best-in-class" companies differ from ours?
- 6. How are the philosophies or strategies of "best-in-class" companies different from ours?

■ Types of information.

To answer the questions above, we need the following types of information:

- 1. How well is the process performed (performance measures)?
 - What are the measures?
 - What dimensions are measured?
 - What is the current performance?
 - What are the historical trends?
 - How are the measures defined?
 - How are the measures calculated?
 - How is the data collected (how taken, frequency, etc.)?
 - How reliable is the data?
 - How is the data reported?
- 2. How is the process performed?
 - What are the work process and methods?
 - What are the roles of those involved?
 - What knowledge and skills are required?
 - What resources are involved?
 - Where is the process performed?
 - When is the process performed?
- 3. What structures enable the performance of the process?
 - What training is required?
 - What is the compensation?
 - What recognition is there?
 - What is the organizational structure?
 - What are the supporting communications?
 - What are the interrelationships?

- 4. What is the underlying culture?
 - What are the organizational values?
 - What are the organizational strategies?
 - What is the management style?

NOTE: To fully understand a process you must broaden your outlook to encompass the structure and culture which enables the process to succeed. The process itself does not stand alone nor can you copy the process without understanding its full context. To "adapt, not adopt," as Deming advised, requires understanding the supporting structure and culture which enable a process to be "best in class". Consequently, questions about structure and culture are critical.

■ Types of questions.

There are two types of questions:

- 1. **Open-ended:** Open-ended questions require people to answer in their own words. Open-ended questions do NOT have any predeveloped answers, unlike multiple choice. An essay question is an example of an open-ended question. To maximize the potential of open-ended questions, avoid verbs like do, as is, are. Such verbs elicit straight yes/no responses. Focus on how, what and why to elicit detailed answers.
- 2. **Closed-ended:** The person chooses an answer from the ones you have provided. Multiple choice questions are an example of a closed-ended question. Others are yes/no questions and scales.

There is no single right answer as to when to use which type of questions. Some suggestion are as follow:

Use open-ended questions when;

- 1. You are in an exploratory and discovery mode
- 2. You want to uncover new information and new issues you did not know previously
- 3. The information you need is descriptive in nature, such as how a process is performed
- 4. You need input for developing closed-ended questions
- 5. You are conducting a face-to-face or telephone interview

The strength of an interview is the ability to ask open-ended questions and to follow up on the answers. Asking close-ended questions during an interview minimizes the strength of the interview format. Closed-ended questions can be sent before the interview. If there are any answers to closed-ended questions which need to be discussed or clarified, they then can be discussed during the interview.

Use closed-ended questions when;

- 1. You have a good idea of what information you need
- 2. The desired responses can be answered quickly

■ Process for developing questions.

- **☑** Brainstorm questions.
- ☑ Do a group affinity diagram.
- ☑ Develop a list of goals upon the groupings of the questions.
- ☑ Develop a matrix of the goals and the questions. Down the left hand side of the matrix list your goals. Then determine which goal each question addresses and put the number of the question beside each goal.
- ☑ Check that you have enough questions for each goal. Develop additional questions, if necessary.

- ☑ If you are benchmarking a process, check to see that all questions are related to a process map or a map of an organization system.
- ☑ Decide which questions are essential and which are nonessential. Delete the non-essential questions. Be ruthless. There is no room for nice-to-know information.
- ☑ Redo the matrix to ensure all goals have an adequate number of questions. If benchmarking a process, check again that you have a good mix of process and process enabler questions and also that all questions are related to a process or organization system map.
- ☑ Put the questions into a logical sequence; categorize into meaningful subsections where appropriate. Begin with easy questions. Place the more important questions in the middle of the survey and the demographic questions at the end. At this point you also may identify redundancies to be deleted.
- ☑ Critique the questions themselves, using the guidelines for common pitfalls in writing questions. Also check that all of your questions are impartial and non-leading.
- ☑ Pilot the questions. Depending upon the outcome, you may need to rework the questions--rewriting some, adding some new ones, and perhaps deleting some. Also ask yourself, "Will my partner be capable of answering these questions?" and "Are there any reasons why a partner would not answer a question?"
- ✓ Using either data from the pilot or fake data, analyze the answers to the questions. At this point you may need to rework the questions--rewriting some, adding some new ones, and perhaps deleting some. Ask yourself, "Do these questions get us the information we need?"
- ✓ If necessary, tailor the question set for a specific partner.

Remain open to changing the questions as you collect data. However, keep in mind that if you have already collected data from a partner, you may need to revisit them to ask any additional questions you develop later.

■ Pitfalls to avoid in asking questions.

- ☑ Did you use words which could mean different things to different people? (In a customer survey, for example, "timeliness" can mean either that you got the product or service when the supplier promised delivery or when you actually wanted it. Such words make it impossible to interpret the results because you don't know how your partner interpreted the question.)
- ☑ Does the question actually ask more than one thing? (Did you receive your order on time and was it accurate?)
- ☑ Is the question too vague? (Is life treating you well?)
- ☑ Is the question too precise? (How much did you spend in the cafeteria five years ago?)
- ☑ Is the question biased? (Which group of idiots is responsible for the incredibly high rate of inflation?)
- ☑ Is the question to demanding? (Below are 35 factors relating to customer satisfaction. Rank them in order of importance to yourself, your organization, and national security.)
- **☑** Would you be comfortable answering this question yourself? (The last time you murdered someone, what type of weapon did your use?)
- ☑ Does the question contain abbreviations, jargon, or unconventional phrases?
- ☑ Is the question too long? (How do you feel about the United States' current and complex foreign policy regarding the varied rates of tariffs on foreign goods and services coming into this country?)
- ☑ Are there any double negatives, which confuse people, in the question? (Would you not buy the lawn mower if it was not cheap enough?)
- ☑ Have you defined all key terms? (What procedures should you follow to ensure TEMPEST requirements are met?)
- ☑ Have you used simple and direct wording? (How many people on your current payroll do you pay?)

☑ Have you used moderate rather than extreme phrasing? (Is the response time from your vendor all you could expect?(extreme) Is the response time from your vendor reasonably good?(moderate))

Sample questions.

- What is your process?
- What is the purpose/application of this process in your organization?
- How would you describe this process?
- What works/worked well?
- What is/was not working well?
- What major improvements are planned in this area?
- Is there a flow chart for this process?
- How was this process deployed throughout your organization?
- How well does this process perform over time and at multiple locations?
- How do you measure process performance? What are the key measurements?
- What are your organizational values?
- How much and what type of training do you provide for this process?
- What lessons have you learned that would be valuable to pass on?

Question Format.

- Organize the questions so that they follow a logical flow
- Start and end with "easy" questions

Tips for analyzing and reporting the answers.

Before asking the questions, have your analysis and reporting already planned out so that you can analyze and report as quickly as possible. Data ages; its shelf life is short. Once you have the data in hand, you have no time to waste in such details as what software package will be used to prepare the report and who will actually process the report.

Code your questions so that responses can be organized according to the original set of questions. Compile the responses in a response table.

Guidelines for Initial Contact

Prepare carefully before contacting any potential partners. First, review the Benchmarking Code of Conduct. It is the protocol which governs all benchmarking exchanges.

Additionally, potential partners require information so that the request can be routed and evaluated and a timely decision can be made concerning partnership. The more information provided, the more likely it will be that the potential partner will respond positively. One piece of information which is critical is your questionnaire. Have your questionnaire or at least a draft ready before you call. You also should have a short description of your project.

Prepare a script addressing the following:

- Name and description of your organization
- Name and description of the process/function/area to be studied
- Goals and purpose of the study
- Intended use of the information to be obtained
- Why the potential partner has been selected
- Other targeted companies and/or industries to be contacted
- Other companies/organizations which have agreed to participate
- Current status of the requester's benchmarking study
- Current status of the requester's internal analysis
- How the requester's process has been documented
- Key performance metrics associated with the study
- Status and nature of questionnaire development and the actual question set
- Desired time frame/project schedule
- Suggested formats for information exchange (mail questionnaire, telephone interview, site visit, sharing of process documentation, video conferencing, conference call)

- Limits or restrictions on information exchange; suggested terms for confidentiality (use of non-disclosure agreements, etc.)
- All participants' adherence to the Benchmarking Code of Conduct
- Any involvement of a consultant
- Advantages to the potential partner for participating (Will the final report be shared with the study partners? Do any of the requester's practices offer an opportunity for a reciprocal exchange?)

Telephone Script

Initial Contact

Example of Script Package:

Things to be aware of before you make the contact:

- ◆ Don't scare them off. Don't start out by saying that we are looking for "benchmarking partners", this may be more than an organization wants. It would be better to secure the organizations general interest, before detailing the needs of the study.
- ◆ Convey your knowledge of the organization and their particular area of success. The individual you speak to may be more willing to work with you if they feel you have researched their company.
- ♦ Connect with the person on the telephone. Gaining entry into an organization may depend on how effectively we interact with and respond to initial contact.
- ♦ Emphasize convenience of the proposed exchange, advantages of participation, confidentiality of the process, and if necessary that we are adhering to the Benchmarking Code of Conduct.
- ♦ Keep in mind the target company's priorities and schedule. Remember that the target organization has the option to say "no" or ask for flexibility concerning the terms and conditions of the collaboration.

Script

Hello. My name is	
and I am with the	Currently we are
examining and rethinking our Human	Resource systems and management
structure. A critical part of this effort	includes looking at "Best Practice"
companies who are leaders in	Based on our
teams literature research, we have iden	tified your organization as a leader in
this area.	

I would like to ask you (or the appropriate person) some questions that will take about 30-40 minutes. Is this a good time or can I make an appointment for a time more suitable for you. Would you prefer to see the questions first? (If so fax the questions and a Letter of Introduction) Make an appointment to talk after the questions have been reviewed. (If the organization seems reluctant to make an appointment, this might be the time to see if they are interested. If they are not, say thank you and good-bye.)

If they agree to the interview, assure them of the following:

- The questions we are asking are screening questions. If your organization meets the screening criteria, we would like to ask follow-up questions at a later date and in return will send you a report on our study.
- Are you going to share gathered information with other benchmarking Best Practice organizations you contact? If so you need to make all organizations aware of this fact.
- We are asking that each organization share with us useful information about their experiences, as well as any documentation they have.
- We recognize confidentiality issues and time constraints.

- We will adhere to the Benchmarking Code of Conduct and will be flexible concerning any terms and conditions. We are members of the International Benchmarking Clearinghouse.
- If appropriate, and given consent, we would also like to schedule a site visit so our team could study the best practice. We will coordinate all the logistics with the objective of being the least disruptive as possible.
- Before I begin the questions, do you have any questions of me? (If they do, answer their questions as best as possible. If you can't answer the questions, note them and respond later.)
- At this point confirm the information you know about this organization and then proceed with the screening questions.

Screening Questions Cover Sheet

DATE:		
ORGANIZATION:		
SUBJECT MATTER:		
POC NAME:		
POC TELEPHONE NUMBER:	FAX:	
MAILING ADDRESS:		

Questions Following Pages

If you are participating in an interview list each question separately on a sheet of paper. This way you will have plenty of room to enter their responses. If through research you have answers to some of the questions, make notes so that you can verify the information with the potential partner. This also lets them know that you have done your homework.

Letter of Introduction

Before the initial contact is made, a benchmarking contact letter should be prepared. Immediately following the contact, if there is any interest fax a letter IMMEDIATELY! Also be prepared to fax questions and a description of the project.

The contact letter should include:

- Objective of the benchmarking study
- The reason the benchmarking partner was chosen
- A brief description of your organization
- **■** Topics and process areas of interest
- List of specific questions to be addressed
- Invitation to reciprocate with information on the internal process
- Intention to share findings of the benchmarking exchange after analysis
- **■** Benefits to both parties
- If attaching a mail survey, a deadline for response and the return contact information

Letter of Introduction

Example

September 21, 1995

Patent and Trademark Office Center for Quality Services ATTN: Norma Jo Greenlee Crystal Park One 2011 Crystal Drive Suite 812 Arlington, VA. 20222

Dear Mrs. Greenlee:

Thank you for agreeing to answer the questionnaire pertaining to Self Managed Work Teams (SMWTs). As I mentioned on the telephone the Patent and Trademark Office (PTO) has decided to research the possibility of introducing SMWTs within our organization. Any information that you can provide will be greatly appreciated. We appreciate the opportunity to learn from you in this reinvention endeavor.

The questions attached are screening questions. If your organization meets the screening criteria, we would like to ask follow-up questions at a later date and in return we will send you a report on our study.

We recognize confidentiality issues and we will adhere to the Benchmarking Code of Conduct.

Thank you again for your participation in this study. By all of us helping each other, we can make a difference in our federal government, and in the lives of the American people.

Patrick Zodiac

Ranking Work Sheet

Potential Partner	Pros	Cons	Ranking Order
	1 2 3 4	1 2 3 4	

Comparability

Example

Process	Criteria for Comparability	Possible Analogies
Brewing beer		A. Making soda syrup B. Manufacturing shampoo C. Packaging
Forming uranium		A. Extruding pet food pellets B. Running x-ray equipment C. Manufacturing aspirin
Retooling production lines in real time		A. Changing costumes between acts B. Servicing a race car during pitstops C. Preparing fast food
Campaigning for political office		A. Trying a criminal case B. Tele-evangelizing C. Awareness program explaining new taxes
Just-in-time distribution of manufacturing parts		A. Delivering newspapers B. Distributing meals-on- wheels C. Supplying fast-food restaurants

Conducting A Telephone Interview

Telephone interviews need to be specific, highly information targeted, and relatively short in length. Questions must be relatively simple. Reserve complex and involved questions for a written survey or personal interview.

- Prepare the interview questions in advance and pretest them on the phone in one's own company.
- Prioritize the list of interview candidates and contact the most important contacts first. The most important often provide the most relevant and useful information.
- Try to ask for a specific individual. Perhaps the most difficulty is in locating the right person who has the knowledge and can answer the questions.
- Use referrals whenever possible.
- Provide an estimate of the time needed for the interview. Busy managers often prefer to schedule a convenient time for the interview.
- The interviewer may need to assist the respondent by sharing information and explaining what information the interviewer needs. If a respondent does not understand a question, the interviewer may need to clarify it; at times this is best done by sharing early research findings and operating experience that provide examples of the type of information you are seeking. The interviewer can also provide answer options or ranges.
- It may be necessary to provide an incentive to the respondent to gain cooperation or coordinate responses within the company. Sometimes a copy of the results is good enough.
- Conduct the interview so that it has three stages: opening, data collection, and closing. During the opening, establish a rapport, explain who you are and why you are calling, and discuss the ground rules. During data collection, get the answers to the questions. During the closing, thank the respondent and promise to follow up with feedback.

Conducting An Interview

These are general guidelines for conducting an interview and can be used for both telephone and face-to-face interviews.

Before the interview.

- Prepare a form for notetaking. The first page of this form should have the date, name of the interviewee, and interviewers. Every question should be listed with plenty of room to record the responses, as well as large margins to allow the person taking notes to record their own comments.
- Select teams for interviewing. Have at least two people on each team; one will ask the questions and one will take notes.
- Practice conducting the interview.

Act as if it is a real interview
Have team members practice different roles
Following the practice interview, have your team discuss the interview

During the interview.

♦ Establish the context and build rapport.

This should take about 5% of the interview time.

- **■** Exchange introductions
- **■** Emphasize the need to ask all of the questions
- **■** Clarify objectives
- Confirm the agenda. Establish a relaxed, trusting atmosphere
- Stress the confidentiality of the interview

◆ Conduct the interview.

This should take about 75% of the interview time. The following general instructions for conducting the interview are followed by suggestions for how to respond to inadequate answers with probes.

- Ask one question at a time.
- Listen. Listen. Give them time to respond. Silence is your ally, not your enemy. Use it.
- If necessary, rephrase questions for better understanding.
- Explore! If you identify an important point, ask questions. Do NOT adhere to the planned question set at the risk of missing something important.
- Listen for any second-level meanings beyond the interviewee's exact words.
- Frequently confirm what was heard.
- Be willing to accept "roughly right."
- Ask for specific examples and details
- Look for opportunities for quantification. If direct measures are too sensitive, use substitutes.
- Keep the interview focused.
- Follow up with probes when appropriate.

Probes

A probe is a response aimed at having the interviewee give you a better answer. Sometimes the best probe is silence. Wait. In general, though, keep in mind that no matter how you phrase a probe, keep the probe neutral so that it does not lead to a particular response.

Examples of inadequate answers and suggested probes:

- If the interviewee fails to answer the question asked and answers a different question, *repeat* the question.
- If the answer contains unclear concepts or terms that make its meaning ambiguous, ask the following question:

How do you mean that?

■ If the answer is not clear or specific enough, ask the following question:

Could you tell me more about that?

■ If the answer is perfectly appropriate, but there is a possibility that the interviewee could make additional points, ask the following question:

Is there anything else?

The response "I don't know" is a special case. There usually are four different reasons why an interviewee might respond this way. The following gives those four reasons and suggested probes.

■ It is the interviewee's way of saying "I am thinking about it and will answer in a minute."

Wait. Then repeat the question.

■ This is a new thought for the interviewee. They may be able to answer after a few minute's thought.

Encourage them to respond, emphasizing that they are uniquely qualified to provide information. Repeat the question.

■ The respondent knows an answer, but thinks it is not specific or accurate enough.

Be reassuring. There are no right or wrong answers. Repeat the question.

■ This response is a valid, thoughtful response to the question. Write down the answer and proceed.

Record and analyze the answers.

- As much as you can, write down the interviewee's responses verbatim. However, do not let note taking hamper the interview.
- Leave wide margins so that you will be able to insert your own comments and insights.
- If you have an important idea, write it down IMMEDIATELY.
- Immediately after the interview, write down your notes and thoughts. If you wait, you will forget them.
- Talk to your team about the results.
- Look for common themes.

End the interview.

This should take about 20% of the interview time.

- Summarize the information and check your understanding.
- Answer any questions the interviewee has.
- Provide positive feedback on the interview.
- Explain how the findings will be disseminated.
- **■** Thank the interviewee.

After the Interview.

Immediately following the interview, the interviewing team must meet, view the notes, and write an initial summary of the interview. DO NOT PUT THIS OFF UNTIL LATER! If you wait, you will forget important information.

Conducting A Teleconference

- Publish the agenda.
- Let each participant know who will be in attendance and what their role will be.
- Agree beforehand what you will use for a memory system.
- Before the meeting begins have participants and materials situated around the microphone so that everyone has access to it.
- Pay attention to the placement of books, papers, pencils, cups, cans, etc. Do not place them close to the microphone.
- **■** Come prepared.
- Stay organized.
- Stick to the agenda.
- Make sure you have allotted adequate time for the meeting.
- Remember that transmissions are one way. Two people can not speak at the same time and be heard.
- Always pretest your questions on the phone.

Site Visit

Site visits are expensive for all concerned. For those visiting, there are travel costs and preparation. For the host, there is the time invested in both the preparation and the hosting of the visit. However, it can be the best means of sharing information. Given both the expense and the potential benefits, prepare carefully and thoroughly for the site visit. Although these guidelines are lengthy, it is best to be thoroughly prepared.

Before the visit.

- Provide information on your organization to your partner.
- Consider scheduling a pre-visit to handle logistics and clarify the purpose of the study with all participants.
- Review all available information about your partner. You should know the size of their business, the industry in which they operate, the type of ownership, the organizational structure, the style of manufacture and your estimation of their core competencies.
- If possible, evaluate your partner's culture--how formal is their culture, what sort of participation is common in their decision making process, and what is their communication style.
- Determine what, if any, audiovisual equipment will be needed and make sure the partner will have it available.
- Offer several choices of dates on which to visit.
- Develop an agenda for the meeting. Discuss this with your partner. Once finalized, give it to your partner at least two weeks prior to the meeting. Include type of meeting you want, length of visit, and what you want to accomplish.
- Develop a list of attendees for the meeting and give this to your partner at least two weeks prior to the meeting.

- Develop a list of questions and give those to your partner at least two weeks prior to the meeting. Ask only for information which, we are willing to share ourselves. Be prepared to give your own answers to the same questions.
- Determine the roles of team members:
 - ⇒ Who will be the team leader?
 - ⇒ Who will be the discussion moderator?
 - \Rightarrow Who will be the recorder?
 - \Rightarrow Who will be the timekeeper?

Plan to have members ask questions relating to their respective areas of expertise since it will be their responsibility to understand and effectively evaluate the data gathered and apply it in the analysis. If these people have not conducted an interview before, train them.

- Have team members review all questions and know their organization's answers to the questions.
- If you are a customer of this partner, invite the local sales representative or account manager to attend.
- Determine if any information to be requested or shared is proprietary or classified information. If so, establish how confidentiality will be maintained.
- Plan to exchange business cards.
- Develop a briefing package.
- Set up and hold internal visits to collect information and to evaluate your approach to gathering information.
 - ☑ Do you know how you would respond to each question?
 - ☑ Does the internal organization have any trouble in understanding the questions?
 - ☑ Review and critique your input and then make appropriate changes to the questions.
 - ☑ If the internal organization is interested in participating, define their roles and responsibilities.

- Send a letter to confirm the visit. The letter should include:
 - **☑** Introduction
 - **☑** Thank You
 - ☑ Information on who will be attending
 - ☑ Logistics (name and telephone number of the hotel, arrival and departure times, appropriate airline information, questions for the meeting)
 - ☑ Confirmation of where you will first meet, such as "We will meet you in the lobby at 8:15 on Tuesday morning."

During the site visit.

- Introduce team members. Each member should explain their functional role, responsibilities and their objectives in the benchmarking effort. Asking the benchmarking partner to do the same will ensure the correct people are in attendance before starting the session.
- Identify team roles within the interview team.
- When appropriate, spend some time socially to develop a rapport. Food is excellent for facilitating social rapport.
- State the objectives of the visit and the process to be followed.
- Reconfirm the agenda and make sure everyone has copies.
- Review benchmarking project description.
- Communicate why the company was selected.
- Follow the list of questions submitted, asking only one question at a time. Begin with open-ended questions on general areas of interest before proceeding to specifics. As questions are introduced, defining a specific operations or processes will eliminate any confusion between company-specific terminology and clarify who should be responding with the required information.
- Use the questions to drive the meeting. Make sure everyone has copies.
- Don't ask for information we would not be willing to share ourselves.
- Caucus and regroup at breaks

- Travel in pairs or small groups during any site tours. This offers advantages: one person can take notes while another talks; the team can split up to observe different operations; team members can validate important points and observations.
- Before closing with a review, have the team meet to ensure that all questions have been answered thoroughly and to develop any additional questions which should be addressed before the session ends.
- Close with a review. List any follow up issues to be completed/clarified.
- Thank them for their time, effort and cooperation.
- Offer a reciprocal visit.

After the site visit.

- IMMEDIATELY following the meeting, review notes and write up initial findings. This should take 1-2 hours. Ask the following questions:
 - \Rightarrow What new things were learned?
 - ⇒ What differences are there between our practices and theirs?
 - \Rightarrow Why is this organization successful?
 - ⇒ Did everyone come away with the same understanding?
 - ⇒ What are potential practices for implementation?
 - ⇒ What follow-up activities are needed?
 - ⇒ Do we need any additional information?
 - \Rightarrow Who will perform them?

- Write a trip report summarizing the site visit findings. The trip report might include:
 - ⇒ Contacts within the partner company
 - ⇒ Process flows and supporting documentation
 - ⇒ Measurements related to the process
 - ⇒ Enablers and disablers which were observed and documented, such as organizational culture, appropriate support structures and employee attitudes, etc.
 - ⇒ Applicable practices for potential implementation
 - ⇒ Lessons learned during organizational change, if applicable
- Confirm the accuracy of the trip report with the partner.
- Send a letter of appreciation for the visit.
- Follow up on any requests for information or promises to provide information.

Briefing Package

Before going on a site visit, a briefing package should be prepared and given to all team members and the benchmarking partner.

The briefing package should contain the following:

■ Logistics

Schedule

Location of meeting

Purpose of meeting

- Overview of your organization
- **■** Meeting materials

Agenda

Questions, if not already sent

Attendees, to include biographies

Examples of any flowcharts and/or diagrams that you will

be asking for or referring to

Biographies

Biographies should be included in the briefing package. Include one for every team member going on the visit. The biographies should be kept brief (2-3 paragraphs) and should include the following information:

- \Rightarrow Name of person
- \Rightarrow Position currently held
- ⇒ Description of the responsibilities of the position
- \Rightarrow How long the person has held that position
- ⇒ Brief description of the person's career prior to current position

Example of a Biography Mickey Mouse

Mickey is currently the Chief Greeter at the Disneyland location for Walt Disney, Inc. He has been with Walt Disney his entire career, which spans over four decades. His duties include managing the happiness of incoming customers, as well as the attitudes of the 100 or so characters of which he is in charge.

Prior to his current position, Mickey held a variety of jobs with Disneyland. He started out as a critically acclaimed actor in several Walt Disney films. He then used his stardom in the capacity of a greeter at Disneyland when it first opened. After several very successful years, he then was promoted to his current position, which he has held for the past 15 years.



Checklist:

$\overline{\mathbf{V}}$	Do we know which organizations perform this process better?
	Who?

- Do we know which organization is the "best-in-class" in performing this process? Who?
- What can we learn from this organization?
- Do we know who to contact to determine if they are willing to participate in a study with us? Who?
- Do we know their process?
- **☑** Do we know their performance goals?
- Do we know how well their process performs over time?
- Do we know how they measure their process performance?
- **D**o we know what enables the performance of their process?



PLANNING COLLECTING
BENCHMARKING
STUDY
ANALYZING

Is analyzing the gathered data to determine the findings and propose recommendations.

The nine steps to follow during the ANALYZING stage are:

Organize and reformat the data to show gaps
Determine if all data is meaningful
Normalize performance
Determine partners processes
Compare measurements
Project performance
Isolate process enablers
Evaluate the nature of the process enablers and best
practices
Summarize partners methods

Organize and reformat the data to show gaps:

- ♦ Consolidate the information and develop a uniform method of organizing incoming data
- ♦ Organize the information so that it is easy to read and understand
- ♦ Break up the data into distinct subgroups, this will help identify performance variations and also similarities in pattern development
- ♦ Identify patterns, eliminate companies from consideration and determine that some additional data collection may be required

NOTE: The process of organizing and analyzing data is easier when the data collection mechanism is designed prior to any data collection.

Determine if all data is meaningful:

- ♦ Eliminate inaccurate, false and irrelevant data
- ♦ Determine if any of the information needs to be rechecked or eliminated from the study

Normalize performance:

♦ Convert data into common denominators that make meaningful comparisons, normalize data onto an equal basis. Common normalization factors include scale, age and economy (See S-3-1)

Compare Measurements:

♦ Perform a gap analysis (See S-3-2)

Project performance into the future:

- ♦ Project the benchmark into the future rather than just aiming at today's target
- ◆ Project the gap three to five years from now because industry best practices will continue to improve
- ♦ Define the goals that must be achieved in order to narrow the gap and reach superior performance
- **♦** Identify the enablers to help you reach superior performance level
- ♦ Use historical data to find trends and business developments which will allow you to forecast what the required levels of performance will entail for the future in order to equal the competition

Isolate process enablers that correlate to process improvements:

- **♦** Determine the enablers behind the performance of the benchmark measure (See S-3-4)
- ♦ Understand these enablers so you can adapt the practice from the best-in-class organization to your organization
- ♦ Use the process enablers you discovered during your analysis to drive the development of your improvement goals
- ♦ Rank the enablers based on those having the largest impact on closing the performance gap

Evaluate the nature of the process enablers and best practices to determine their adaptability:

- **♦** Determine if the identified best practice or enabler is adaptable to your business culture
- ♦ Consider if the enablers (variables) are controlled or not
- ♦ Sort the enablers according to the cost required for implementation and select those that will have the greatest impact on customer satisfaction



Pitfalls that can be encountered during a benchmarking study are:

- **♦** Analysis paralysis
- **♦** Overprecision
- ♦ Reasons for gap not identified
- ♦ Interrelationships not understood
- ♦ Cause/Effect not understood
- ♦ Not sticking to subject
- ♦ Value of practices not determined

Example

Listed below are three popular department stores involved in a study. We have decided to compare "Revenue per employee" and "Revenue per store".

REVENUE

	Per employee	Per store (millions)
Hechts	\$145,000	\$25
Woodies	\$110,000	\$50
JC Penney's	\$100,000	\$10

Looking at the above data does not tell much about these companies. To make valid comparisons between these companies normalize the data by asking the following questions:

- 1) How many employees per store?
- 2) How big are the stores?
- 3) How much merchandise?

Once these questions are answered factor in the necessary adjustments that will compare "apples to apples".

Performing a Gap Analysis

To gain a clearer understanding of what you need to do to achieve your goals, you can perform a gap analysis. In a gap analysis you evaluate the level of your current performance and compare it to where you want to be or to another organization's performance. The difference between the two is the gap.

A gap analysis commonly indicates that your performance is below the desired level. However, a gap analysis can reveal that your performance is high-for example, you are ahead of your competition-in which case you would want to maintain or increase the gap.

To be effective, a gap analysis needs to address two areas: the magnitude of the gap and the reasons for the gap. Understanding the magnitude of the gap gives your perspective on the effort necessary to close or maintain it, while understanding the reasons for the gap points out the areas where you should focus your efforts.

Process for performing a gap analysis.

- Graphically present your performance measure, showing both your current performance and the goals you have projected.
- Identify the magnitude of the gap in terms of the unit of measure.
- Using data collected from appropriate sources, determine the reasons for the gap. Sharing information and ideas in a team setting is extremely powerful.
- Prioritize the reasons for the gap.
- Summarize your conclusions. You will use these to determine what actions you should take to reduce, maintain, or increase the gap.

There are several techniques used to show performance gaps and to determine how to close the gaps. (See S-3-3)

Performance Gap Tools

<u>Technique</u> <u>Use</u>

Matrix To display specific measures for each

organization.

Spider Chart Outline key measures with those of best-in-

class. The results will show the gaps in performance identifing strengths and

weaknesses.

Line Chart To compare one current measure with the

best-in-class organization.

Fishbone Diagram A brainstorming tool that explores the

possible causes of a particular effect. This

tool is designed to show the possible

relationships that may exist between variables.

Root Cause Analysis A tool that is designed to explore the reasons

behind a performance gap. This technique breaks down a gap into component causes and evaluates them each as an individual problem.

Spider Chart

A spider chart helps assess the competitive position across the key performance measures of the organization. By charting the organizations performance objectively the organization can identify areas where benchmarking is needed. A spider chart is a good tool for communicating the need for change to upper management.

Steps in using the Spider Chart technique are:

- ♦ Each spoke represents a measure (e.g., M1, M2, M3, M4)
- ♦ Assessment criteria is circular grades that improve as the radius gets smaller. Key measures are assessed across interval scales (e.g., 1 = excellent, 5 = improvement)

Cause & Effect Diagram Fishbone Diagram

A Fishbone diagram is a brainstorming tool that helps guide in organizing of thoughts. The Fishbone diagram takes a consequence and explores all its possible causes.

Steps in using the Fishbone technique are:

- **♦** Determine the problem or the goal that the team is addressing
- ♦ Put the problem or goal in a box to the right hand side of the paper and draw an arrow from left to right
- ♦ Decide major categories around this problem or goal. Typically these will include people, material, methods, equipment, and environment
- ♦ Place major categories in boxes and direct a branch arrow from each box to the main arrow. Brainstorm the causes under each category.

Remember the result should be a cure to causes not the symptoms.

Root Cause Analysis

Root cause analysis breaks down a problem into component causes. Each cause is evaluated as an individual problem to ensure that the root cause has been identified.

Steps in using the root cause technique are:

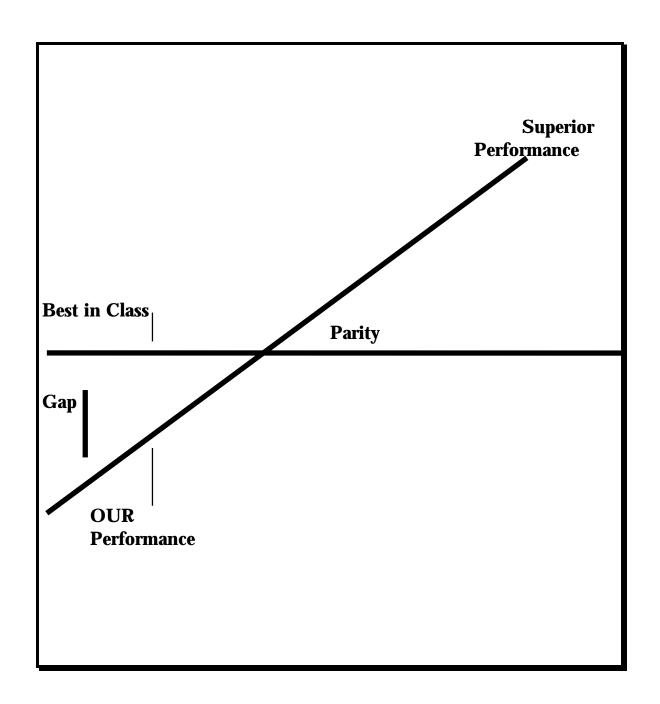
- **♦ Clearly define the problem**
- ♦ List possible causes by using either brainstorming or a Fishbone diagram (see below)
- **♦** Explore the cause identified to the root
- ♦ Collect data to verify root cause
- ♦ Implement a solution and check periodically to ensure that the problem has been corrected

Ask yourself the question WHY until you get to the root cause?

Performance Measurement Gap

Process Step	Our Measurement	Best-in-Class Measurement	Measurement <u>Gap</u>

Gap Diagram



Enabler Worksheet

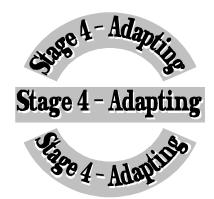
Process/Service	<u>Enablers</u>
	1. 2. 3. 4.
	1. 2. 3. 4.

Process/Service	<u>Enablers</u>
	1. 2. 3.
	1. 2. 3. 4.



Checklist:

- **☑** Do we know our process measures?
- **☑** Do we know our partners measurements?
- **☑** Do we know the performance gap?
- **☑** Do we know the impact of the performance gap?
- Do we know what characteristics distinguish their process as superior?
- \square Can we adapt partners enablers?
- Do we know what activities within our process are candidates for change?



Is the adapting, improving and implementing of the designed action plan.

The eleven steps to follow during the ADAPTING stage are:

Set goals to reduce, meet and then exceed the
performance gap
Incorporate organizational culture and structure during
modification of enablers and best practices
Gain acceptance, support, commitment and ownership
by communicating findings
Develop an operations plan
Develop an implementation plan
Communicate the action plan to management
Obtain resources required for implementation
Implementation of the action plan
Monitor and report progress toward the goal
Identify opportunities for future benchmarking efforts
Re-calibrate the measure regularly

Set the goals to reduce, meet and then exceed the performance gap:

◆ Establish realistic goals that provoke a lesser degree of resistance from within the organization; base them on proven performance exhibited by the best practice organization

(S-4-1)

- ♦ Don't set goals on historical data or assumptions about inflation or market growth
- ♦ Re-examine existing goals
- ♦ Incorporate the results of the benchmark study into the existing units of measure, rather than developing new statistics. This will enhance the degree of acceptance within your organization
- ♦ Address the impact the change will have on the process owners, other offices, meeting customer requirements and the cost to implement
- ♦ Focus on the few that will greatly help close the gap

Incorporate organizational culture and structure during modification of enablers and best practices:

- ◆ Understand and recognize the unique culture which is typically defined by factors such as form of ownership, organizational structure, communication style and degree of trust
- **♦** Recognize the flexibility of your organization to incorporate change and adapt best practices
- **♦** Beware of the diversity aspects
- **♦** Ensure internal communications
- ♦ Instill mutual trust

Gain acceptance, support, commitment and ownership for required changes by communicating findings:

- ♦ Select your method of communication which can include one or a combination of written reports, trip reports or even a newsletter. The report should include all steps followed throughout study, recommendations, conclusions and an impact statement (See S-4-2)
- **♦** Communicate results and obtain buy-in from all affected parties
- ♦ Explain the findings to management
- ♦ Inform employees of the study since they are closest to the operation and may be the source of greatest resistance
- ♦ Gain support from management and front line employees
- **♦** Gain commitment of the necessary resources for implementation
- ♦ Gain acceptance from customers and suppliers
- ♦ Identify your audience and their associated needs

Develop an operations plan:

- ♦ Describe the improved process, new process, and/or new organization and how it will work
- ♦ Describe what practices or behaviors need to change
- ♦ Describe the roles and responsibilities for those involved
- ♦ Develop new and refined measures
- ♦ Develop new or refined human resource policies and systems
- ♦ Explain how the operations plan will be implemented

Develop an implementation plan:

- **♦** Describe the scope of the implementation effort
- ♦ Describe the roles and responsibilities for those needed to plan and carry out the implementation (S-4-3)
- Design deliverables
- ♦ Indicate resources required (e.g., time, funding, training) (S-4-4)
- ◆ Describe new methods and procedures that need to be developed
- ♦ Designate beta or pilot sites, if needed
- **♦** Design methodology for tracking process
- **♦** Describe any tools or skills required
- ◆ Describe and design any support structures needed to equip people with the tools, skills and systems
- ♦ Develop system to check the progress and performance
- ♦ Develop a time frame for assessing gains achieved
- **♦** Develop measures for the new process
- ◆ Design a communication plan for building commitment to the new process
- ♦ Design a contingency plan

Communicate the implementation plan to management for endorsement:

- ♦ Present implementation plan to management
- **♦** Ensure management has complete understanding of the objective
- ♦ Explain the strategy developed to ensure that management understands that the findings support the mission
- **♦** Incorporate the goals into the strategic plan toward superior performance

Obtain resources required for implementation:

- ♦ Convince management that the benefits to be gained from adapting a best practice will far outweigh the cost
- ♦ Explain the effect the new process will have on closing the performance gap
- ♦ Compare the costs of current process to new projected process

Implement the implementation plan:

- ♦ Form a steering committee
- ♦ Form an implementation team of people who work with the process

Monitor and report progress toward the goal:

- ♦ Review measurements regularly that directly impact changes
- ♦ Determine if the goals will be achieved on schedule
- ♦ Systematically report progress to management in order for them to maintain the strategic plans and establish reward systems for recognizing significant improvements in performance

Identify opportunities for future benchmarking efforts:

- **♦** Continually strive for excellence with the hope of achieving innovation
- ♦ Strive to become the superior performer in a process
- ♦ Anticipate customer requirements that have not been met

Re-calibrate the measure regularly:

- ♦ Take a proactive approach periodically to update your benchmark to ensure that it reflects the best practices to date
- ♦ Determine the need to adjust your goals and maybe even find other benchmarking partners

Recommendations Worksheet

Current Process	<u> </u>	Recommended Change	Resources Required	<u>Estimated</u> <u>Result</u>

Report Format

An executive summary.

- The purpose of the benchmarking project
- A short synopsis of the findings
- A short synopsis of the recommendations for action

A description of the benchmarking project--why and how it was conducted and the major findings of the project.

- The purpose of the benchmarking project
- A short summary of the benchmarking process followed
- Rationale for selecting partners and the partners selected
- A description of the data collected
- How our process compares with the others studied
- Practices and behaviors that have been identified as superior

Recommendation for action.

- A determination of the scope of the recommendations, ranging from continuous improvement to reengineering
- A description of what practices or behaviors within the organizations need to change as a result of the benchmarking project's findings
- The roles and responsibilities for those needed to plan and implement the recommended actions
- The roles and responsibilities for those who would be affected by the recommended actions
- Specific events or enablers that are necessary to ensure successful implementation

Appendices.

- **■** Team members
- **■** Benchmarking questions
- Selection matrix for partners

Action Plan Worksheet

Stakeholder/Sponsor: Current Process:	Time frame:
Suggested Change:	
Goals/Objectives:	
Short term:	Time frame:
Long term:	Time frame:
Targets and Milestones: 1. 2. 3. 4.	Date: Date: Date: Date:

Implementation Plan

Process:							
Process Owner:							
Team Mo	embers:						
Strategy	Statement:						
<u>Activity</u>	<u>Ov</u>	/ner	,	Sched	uled Mil	estones	Cost

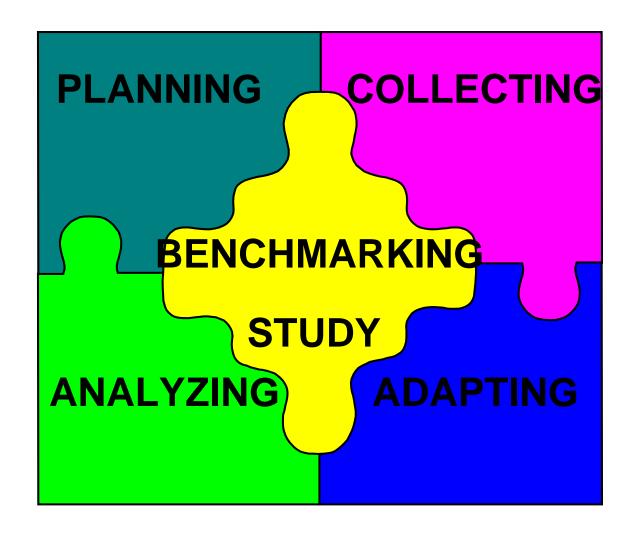


Checklist:

 $\overline{\mathbf{V}}$ Do we know how the knowledge of their process enables us to improve our process? \square Do we know if we should redefine our performance measure or reset our performance goal based upon this benchmark? $\overline{\mathbf{V}}$ Did we communicate results to everyone involved? $\overline{\mathbf{Q}}$ Do we know which activities in our process need to be modified to adapt findings? $\overline{\mathbf{V}}$ Do we know what we have learned during this benchmarking study that will allow us to improve our process? $\overline{\mathbf{V}}$ Do we have an approved implementation plan? $\overline{\mathbf{V}}$ Do we have management/stakeholder/sponsor support? Do we know how to implement these changes into our process?



- Clear understanding of own work process as basis for comparison
- Benchmarking of best functional practices, not just metrics
- Upper management acceptance and commitment
- Development of implementation plan
- Willingness to change and adapt based on findings
- Continuous improvement





Benchmarking Schedule Engineering Schedule

Element	Start Date	Finish Date
Literature Search Criteria		
Secondary Research		
Initial Contact/ Screening Questionnaire		
Review of Initial Data/ Ranking of Potential Partners		
Second Contact/ In- depth Questions - Ranking of Partners		
Develop Research Method		
Develop Questionnaire		

<u>Element</u>	Start Date	Finish Date
Make Site Visit Arrangements		
Site Visit		
Review Data		
Analysis Data		
Write Site Report		
Recommendations		
Implementation		